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CLAIMS:

1. A method of identifying a compound which regulates GDF-8 expression comprising operably linking to a gene an isolated GDF-8 promoter comprising the
5 nucleotide sequence of SEQ ID NO:1, contacting the promoter with the compound in a cultured cell such that the gene is transcribed and expressed, and measuring expression of the gene compared to a control where the compound is absent
2. The method of claim 1 further comprising the step of comparing
10 expression of the gene after contacting the promoter with the compound to expression of the gene without contacting the promoter with the compound, to determine whether the compound has effected expression of the gene.
3. The method of claim 1, wherein the gene is a reporter gene.
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4. The method of claim 1, wherein the compound inhibits GDF-8
expression.
5. The method of claim 1, wherein the compound upregulates GDF-8
20 expression.
6. A method of identifying a compound which regulates GDF-8 expression comprising operably linking to a gene an isolated GDF-8 promoter comprising a
nucleotide sequence which is at least 95% identical to the entire nucleotide sequence of
25 SEQ ID NO:1, contacting the promoter with the compound in a cultured cell such that the gene is transcribed and expressed, and measuring expression of the gene compared to a control where the compound is absent.
7. The method of claim 6 further comprising the step of comparing
30 expression of the gene after contacting the promoter with the compound to expression of the gene without contacting the promoter with the compound, to determine whether the compound has effected expression of the gene.

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8. The method of claim 6, wherein the gene is a reporter gene.
9. The method of claim 6, wherein the compound inhibits GDF-8
5 expression.
10. The method of claim 6, wherein the compound upregulates GDF-8
expression.
- 10 11. A method of identifying a compound which regulates GDF-8 expression
comprising operably linking to a gene an isolated GDF-8 promoter comprising a
nucleotide sequence which is at least 90% identical to the entire nucleotide sequence of
SEQ ID NO:1, contacting the promoter with the compound in a cultured cell such that
the gene is transcribed and expressed, and measuring expression of the gene compared
15 to a control where the compound is absent.
12. The method of claim 11 further comprising the step of comparing
expression of the gene after contacting the promoter with the compound to expression of
the gene without contacting the promoter with the compound, to determine whether the
20 compound has effected expression of the gene.
13. The method of claim 11, wherein the gene is a reporter gene.
14. The method of claim 11, wherein the compound inhibits GDF-8
25 expression.
15. The method of claim 11, wherein the compound upregulates GDF-8
expression.

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